

REMARKS

The Final Office Action dated January 10, 2008 has been carefully considered. Claim 1 has been amended. Claim 2 has been canceled. Claims 1 and 3 are in this application.

The previously presented claims were rejected under 35 U.S.C. § 103 as obvious in view of previously cited U.S. Patent No. 3,471,889 to Mikkelsen in combination with U.S. Patent No. 3,839,763 to Gould. Applicant submits that the teachings of these references do not teach or suggest the invention defined by the present claims.

The Examiner indicated that Mikkelsen does not teach or suggest washing threads that are bent at the middle. Applicant also notes that Mikkelsen does not disclose or suggest a core having a recess having a V-shape. Rather, Mikkelsen teaches a brush holder having flanges of U-shaped parts for providing bearing forces for driving brush rings of a roller brush. Accordingly, there is no teaching or suggestion in Mikkelsen of a washing brush having washing threads inserted in V-shaped recesses of a core. Rather, in Mikkelsen, no washing threads are received in recesses of the core. Instead, Mikkelsen teach away from the present invention by teaching a U-shaped flat bearing face for rotation of a brush ring.

The Examiner also indicated that the bent portions are considered fixed by close contact of adjacent rings and the rings and spacers are positioned in close contact as shown in Fig. 3 of Gould. Applicant respectfully disagrees. Gould does not teach or suggest fixing rings in which washing threads bent at the middle are fixed by close contact between adjacent rings. Rather, Gould teaches that bristles nest in a hub channel 12 and a cable engages the middle of the bristles and extends around the hub channel. Outer borders of the channel side walls are crimped or bent towards each other to tightly compress the bristles over brights formed in the middle of the bristles to anchor the bristles in the channel (Col. 2, lines 55-66). Coupling element 21 can be spot welded to the channel walls to engage the channel side wall sections.

Thus, in contrast to the invention defined by the present claims, Gould does not teach or suggest that washing threads are fixed by close contact between adjacent rings. Rather, the bristles in Gould are fixed by a cable engaging the bristles and crimping of a channel around the cable. However, there is no attachment of the washing threads between adjacent rings since the bristles are held in a channel and not between adjacent rings.

Further, Gould does not teach or suggest spacer rings inserted between fixing rings. As described on page 4, lines 13-17 of the present invention, the threads of the present invention caught by the fixing ring are inserted into the recess and a spacer identical with the fixing ring is between the fixing ring so that the threads are spaced out uniformly within the V-shaped shaped recesses without friction between the threads fixed to the adjacent rings. In contrast, there is no use of fixing rings to attach washing threads in Gould and no combination of fixing rings and spacers to provide the advantages of the present invention. In Gould, brush elements formed of hubs including the channel, described above, can be separated from one another with spacers 31 (Col. 4, lines 1-3). However, there is no teaching or suggestion of combining spacers with fixing rings in which washing threads are fixed by fixing rings. The spacers are used in Gould to separate entire brush elements 10 and are not used in combination with the fixing elements for providing improved attachment within V-shaped recesses of the brush.

The Examiner also indicated that it is clear that if the brush rings of Gould are modified to fit on the core of Mikkelsen a portion of the bent portions will be located in the recesses. Applicant submits that one or ordinary skill in the art would not combine the core of Mikkelsen used to drive a ring shaped brush with the channel and cable mechanism of Gould for holding individual bristles and it is only in hindsight that the Examiner can suggest that these references be combined. However, even if the referenced were combined, neither of the references teach the structure of a washing brush including washing threads inserted in V-shaped recesses fixed by close contact between adjacent fixing rings and a spacer inserted between the fixing rings. Accordingly, the invention defined by the present claims is not obvious in view of Mikkelsen in combination with Gould.

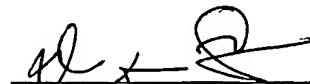
Claims 3 was rejected under 35 U.S.C. § 103 as obvious in view of Mikkelsen and Gould in combination with U.S. Patent No. 4,815,452 to Hundebol.

As noted by the Examiner, Hundebol does not teach washing threads with bent portions that are fixed in close contact between adjacent rings, nor does the reference teach that the washing threads are inserted into recesses formed at a circumference of the core. Accordingly, Hundebol does not cure the deficiencies of Mikkelsen and Gould described above and the invention defined by the present claims is not obvious in view of the combination with Mikkelsen, Gould and Hundebol.

In view of the foregoing, Applicants submit that all pending claims are in condition for allowance and request that all claims be allowed. The Examiner is invited to contact the undersigned should he believe that this would expedite prosecution of this application. It is believed that no fee is required. The Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 13-2165.

Respectfully submitted,

Dated: May 12, 2008



Diane Dunn McKay, Esq.
Reg. No. 34,586
Attorney for Applicant

MATHEWS, SHEPHERD, McKAY & BRUNEAU, P.A.
29 Thanet Road, Suite 201
Princeton, NJ 08540
Tel: 609 924 8555
Fax: 609 924 3036